ABSTRACT OF THE DISCLOSURE

A data processing system stores a first database of component data on components of an equipment. The data processing system stores a second database of maintenance personnel associated with corresponding qualifications. The data processing system associates at least one predictive maintenance factor (for a component) with the corresponding component data. A scheduler schedules maintenance for a maintenance time period for at least one of the components based on the first database, the second database, the associated predictive maintenance factor, and an elapsed time with respect to an installation date of at least one component. The predictive maintenance factor may be defined by one or more of the following: a longevity estimate, a probability of failure, a financial estimate on maintenance of a component.